

COLOUR.—(*In spirits*.) Greenish-brown, with numerous conspicuous spots and small irregular transverse bars of black. Under a lens the spots appear to be made up of thickly crowded black specks upon a dark brown ground: the bars result from some of the spots being confluent. The belly appears to have been white. The rays of all the fins are dotted with dusky, but the membranes transparent and colourless.

The individual described above was taken by Mr. Darwin in a fresh-water brook, in Hardy Peninsula, Tierra del Fuego. His collection, however, contains four other specimens found in streamlets and creeks high up the river of Santa Cruz in Patagonia, where they are said to have been numerous. Though these last are slightly different, they are evidently referable to the same species: they also vary a little from each other. Their peculiarities are as under:

The largest measures 2 inches 8 lines in length, and has the following fin-ray formula:

D. 12; A. 16; C. 16, &c.; P. 14; V. 7.

The next in size is 2 inches 6 lines, with the fin-ray formula thus:

D. 11; A. 16; C. 16, &c.; P. 13; V. 7.

These specimens agree in being both slenderer than the one from Tierra del Fuego. The depth is eight and a half, if not nine times in the entire length: the head rather more than one-sixth of the same. The colours are similar, except that the spots are not quite so numerous, and of a more regular form, seldom running together to form bars.

It is to these specimens that Mr. Darwin's notes refer, respecting the colours of this species in the recent state. As follows: "Pale greenish brown, with small irregular transverse bars of black; belly snow white."—D.

The third of the Patagonian specimens is 2 in. 2 lin. long. Fin-ray formula—

D. 10; A. 15; C. 16, &c.; P. 14; V. 7.

The fourth is of the same length.

D. 11; A. 15; C. 16, &c.; P. 13; V. 7.

These last two specimens are exactly similar to each other in colours, but differ from the former two in being almost immaculate, having only a few spots on the upper part of the back. This brings them very close to the following species, from which they are scarcely to be distinguished, except by their smaller eyes. It should be observed further, that the fleshy part of the tail in these specimens has the upper and under edges fringed with the short accessory rays of the caudal, a character which is not so obvious in any of the others.

2. MESITES ALPINUS. Jen.

M. viridescens-fuscus, dorso saturatiore; hoc, et lateribus, et pinnis, nigro levissimè irroratis, immaculatis; ventre niveo; oculis majusculis.

D. 10; A. 16; C. 16, &c.; P. 13; V. 7.

LONG. unc. 2. lin. 5.

FORM.—Very little difference in form between this and the last species. The eyes, however, are decidedly larger, measuring in diameter one-third the length of the head. The head itself also appears somewhat longer, being nearly one-fifth of the entire length. The anterior teeth on the tongue do not seem much larger than the others. Fins similar.

COLOUR.—(*In spirits*.) Greenish brown, deepening in tint at the top of the back. Back, sides, and fins, immaculate, but thickly powdered with minute dark specks, scarcely visible except under a lens. These specks give the fins a more dusky appearance than they possess in the last species. The belly appears to have been white.

A second specimen does not differ from the above in any respect, except in being rather smaller, and scarcely more than two inches in length.

Habitat, Tierra del Fuego.

This species was taken by Mr. Darwin in alpine fresh-water lakes in Hardy Peninsula, Tierra del Fuego. I have no hesitation in considering it distinct from the last, as there are two specimens exactly similar, both shewing a larger eye, and an entire absence of all approach to spots; while the whole surface of the back and sides is thickly irrorated with dark specks, a character which does not appear in the plain varieties of the *M. maculatus*.

3. MESITES ATTENUATUS. Jen.

PLATE XXII. fig. 5.

M. viridescens-fuscus, ventre vix pallidiore; dorso, et lateribus, pinnarumque radiis, sparsim nigro levissimè irroratis, immaculatis: corpore prae-gracili, anticè attenuato; capite et oculis minoribus.

D. 11; A. 17; C. 16, &c.; P. 12; V. 7.

LONG. unc. 2. lin. 6.

FORM.—Rather more slender than either of the last two species, the body more attenuated anteriorly; the head also smaller, though scarcely shorter. Mouth and eyes both smaller; the diameter of the latter not more than one-fourth of the length of the head. Teeth also rather more minute as well as more numerous. The fins are similar, except that the ventrals appear to stand rather more forward, being attached exactly in the middle of the entire length, excluding caudal: the distance from their insertion to the commencement of the anal is more than twice their own length. The outer rays of the caudal are worn, but there was probably a shallow notch when entire: the short accessory rays are very numerous, and form a very distinct fringe along the upper and lower edges of the fleshy part of the tail.